

## **Malaria** **(*Plasmodium falciparum*, *Plasmodium malariae*, *Plasmodium vivax*, and *Plasmodium ovale*)**

*Disease Fact Sheet Series*

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### **What is malaria?**

Malaria is a serious disease caused by a microscopic parasite that affects red blood cells. There are 4 species of malaria parasite: *Plasmodium falciparum*, *P. malariae*, *P. vivax*, and *P. ovale*. The severity of disease depends on the species of *Plasmodium* causing the infection.

### **Who gets malaria?**

Any person can get malaria if they are bitten by a mosquito in a region where malaria occurs. Almost all cases in the U.S. are acquired during travel to other countries.

### **How is malaria spread?**

Infected humans carry the malaria parasite in their bloodstream. Malaria is spread when a mosquito ingests blood from an infected person. The malaria parasite develops into an infective stage within the mosquito and later is injected into another person when that infected mosquito feeds again.

Malaria can also be acquired by receiving a blood transfusion from an infected donor, and by the sharing of contaminated syringes. Rarely, the parasite can be passed on to infants born to infected mothers.

### **What are the symptoms of malaria?**

Malaria is a disease commonly characterized by fever, chills, headache, and sweating. Depending upon the species, severe illness may take on a variety of illnesses, including coma and death. Infants may also acquire the disease at birth. The infected person may also develop relapses throughout their life.

### **How soon after exposure do symptoms appear?**

The appearance of symptoms is dependent on the species of *Plasmodium* but can vary from 7-days to 10-months.

### **Where is malaria found?**

Malaria is common in most developing countries. Travelers to Central and South America, the Caribbean, sub-Saharan Africa, India, Southeast Asia, the Middle East and South Pacific are especially at risk.

### **Do infected people need to be isolated or excluded from work or school?**

Patients with malaria need not be excluded from work. Persons who have had malaria should not donate blood ever during their lives.

### **Can malaria be treated?**

Patients with malaria should **immediately** seek medical attention. Malaria can be effectively treated if diagnosed early, but infections caused by *P. falciparum* can cause more severe infections and can be harder to treat.

### **How can malaria be prevented?**

Although there is no vaccine currently available against malaria, there are oral drugs that can prevent travelers from getting infected while visiting areas in which malaria is common. Travelers to such areas can further protect themselves by using anti-mosquito measures such as mosquito netting and insect repellents.

It is **very important** for any person traveling to areas where malaria occurs to consult with their physician about the current recommendations for preventive medications against the disease. Information about the occurrence of malaria in various parts of the world and about the most effective preventive drugs can be obtained from the Centers for Disease Control and Prevention (CDC) homepage on the internet ([www.cdc.gov](http://www.cdc.gov)), your physician, and local and state health departments.